

# Vatsa Patel

Passionate & Proven Software Engineer | Looking for Summer 2021 Internships

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 /VatsaPatel

## Experience

### Software Engineering Intern | 3D RoomSpace

Los Angeles, CA • May 2020 - Aug 2020

- Developed core services for the rental platform to **automate leasing, manage listings, deploy contracts on blockchain**.
- Rearchitected the backend services to serverless environment **reducing projected server costs by 60%**.

Tech Stack: Node.js, GraphQL | React Native, React, Gatsby | DynamoDB | GCP Kubernetes Engine, Cloud run

### Contractor Software Engineer | Multiple Companies

San Francisco, CA • May 2020 - Present

- **UniversityEats**: Building service using Plaid to **automatically analyze spendings from all linked banks** and set goals.
- **PodSource, SF**: Helped move to a scalable serverless architecture **reducing monthly bills by 72%**.
- Built a tool to **automatically tag and push docker images to 8 different Container Registries** with multiple logins.

### Software Engineer | A D Patel Institute of Technology

Multiple Projects • Part-Time • Aug 2016 - Sep 2018

- Designed & **developed a Learning Management Platform** that automates and solves existing paper-based problems of Class Scheduling, Information sharing, Evaluations, Asset Management.
- **Lead & mentored a team of 5 engineers**, We **engineered highly-available backend services** that are deployed through an in-house private cloud cluster through OpenStack with auto-scaling.
- **Developed a social platform from scratch** to allow Alumni to reconnect with each other, discover other alumni in same region and profession, share jobs & events. **Attained 6,400 users within first 3 months**.
- In-house designed & 3D printed biometric fingerprint devices that facilitate classroom attendance centrally.

Tech Stack: Node.js, Golang, Java | React, React Native, Electron | PostgreSQL, MemSQL, HBase, Redis

### Smarq Technologies | Founded a Startup

Dec 2015 - May 2016

- **Ideated a startup at Qualcomm incubator** which was selected in the top-10 startup ideas out of thousands of applicants.
- Smarq: A tightly-knit ecosystem of smart sensors capable of automation sequences based on local location of user.

### Software Developer | Purva Couture

Aug 2015 - Dec 2015

- Single-handedly **built a Business Operations system** that managed from Sales to Production to Deliveries **handling 700+ clients & revenue of \$1M+**.

## Projects

### SlackHR

Feb 2020 - May 2020

- Built a Slack plugin application that helps combat abusive conduct at a workplace backed by a Multi-Label classifier using Neural Network. **Currently used at IBM research team's Slack**.

### Reverse proxy to increase downlink bandwidth

Aug 2019 - Sep 2019

- Created a reverse proxy that substantially minimizes the effect of Bandwidth Delay Product on TCP Throughput by buffering the file on multiple connections.
- Preliminarily **achieved 8x improvement in streaming** on intercontinental bandwidth with BBR congestion control.

### Federated Learning - Privacy Enhanced Collaborative Machine Learning

Jan 2019 - Aug 2019

- Federated learning is a machine learning technique that trains global model on edge devices but never exchanging user's personal data thus preserving privacy but still maintaining benefits of large scale machine learning.
- Submitted and **got invited to present my research paper** on an optimized Federated Averaging Algorithm.

## Skills

**Backend:** NodeJS, PHP, Python, Java, C++    **Database:** SQL : MySQL, Postgres | NoSQL : MongoDB, Redis, DynamoDB  
**DevOps:** AWS, GCP, Docker, Kubernetes, CI/CD.    **Frontend:** JavaScript : React, React-Native, Android, HTML/CSS

## Education

### San Jose State University

Dec 2019 - Dec 2021 Expected

Candidate for Masters in Computer Science. **Current GPA: 3.85**  
Dual Specialization: Cloud Computing and Network Programming

### Gujarat Technological University

Jul 2015 - Jul 2019

Bachelor of Engineering in Computer Science. **GPA: 3.97**